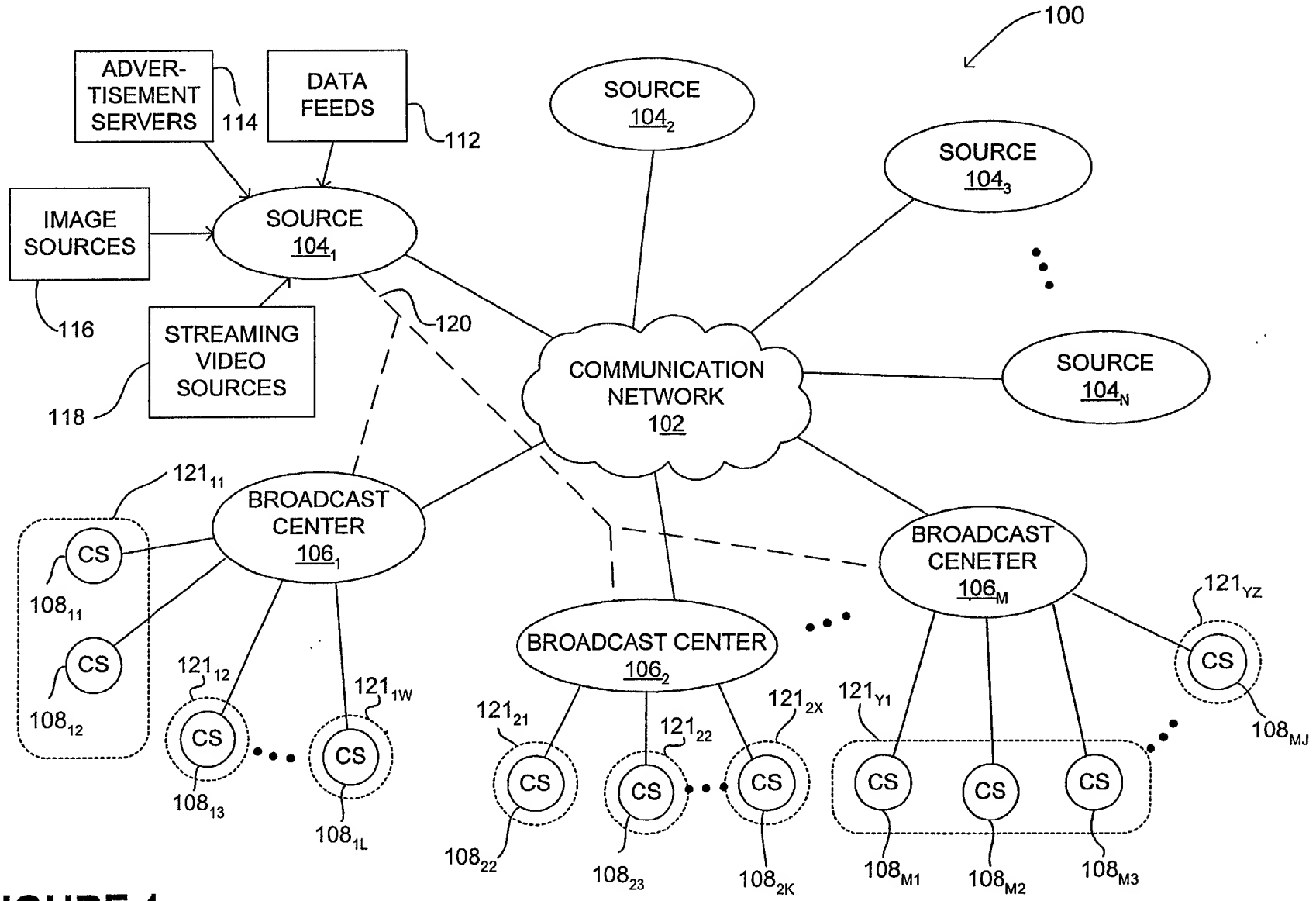
100
ADVER-TISEMENT SERVERS
114
DATA FEEDS
112
SOURCE 104_2
SOURCE 104_3
IMAGE SOURCES
SOURCE 104_1
116
STREAMING VIDEO SOURCES
118
120
COMMUNICATION NETWORK 102
SOURCE 104_N
121_11
BROADCAST CENTER 106_1
CS
108_11
CS
108_12
121_12
121_1W
CS
CS
108_13
108_1L
BROADCAST CENTER 106_2
121_21
121_22
121_2X
CS
CS
CS
108_22
108_23
108_2K
BROADCAST CENETER 106_M
121_Y1
121_YZ
CS
CS
CS
CS
108_MJ
108_M1
108_M2
108_M3

FIGURE 1

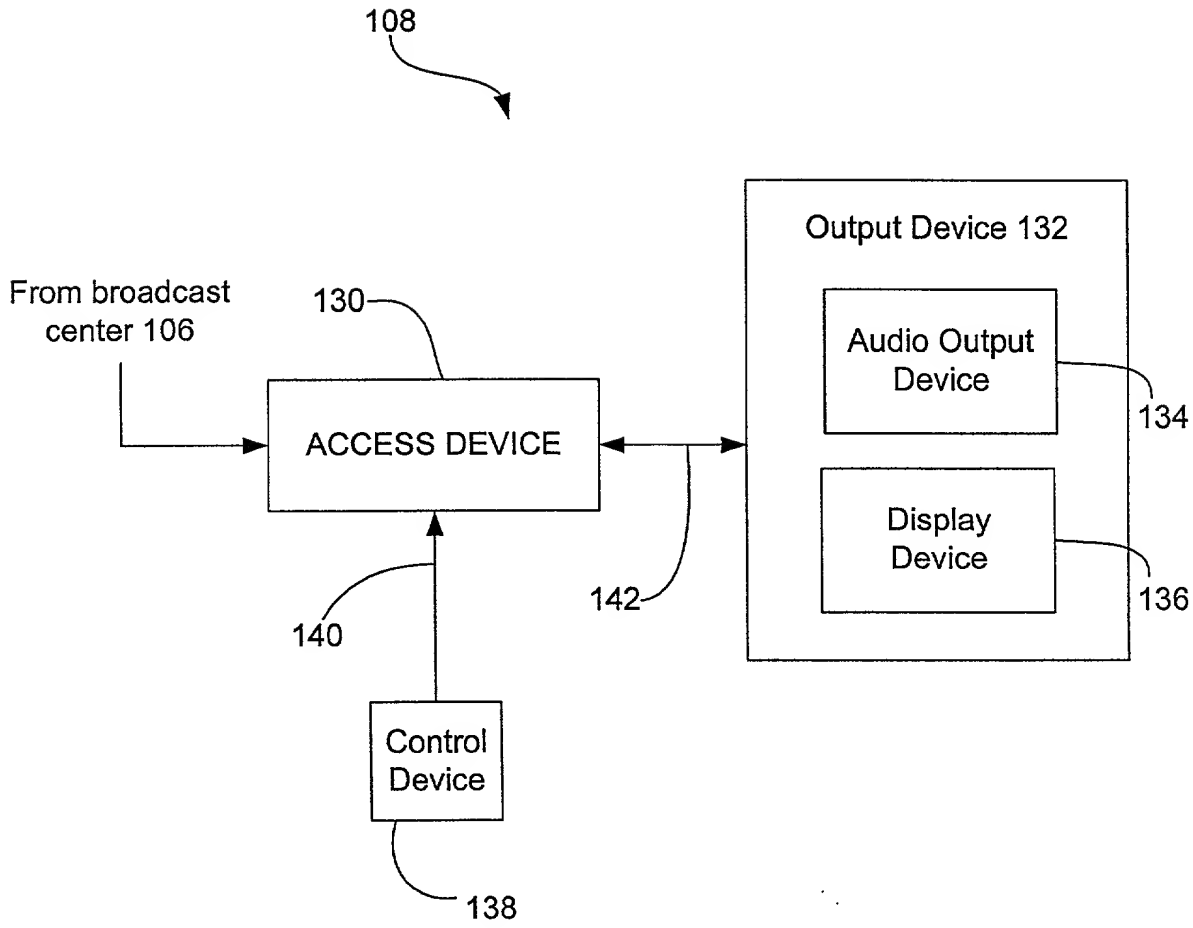
108
From broadcast center 106
130
ACCESS DEVICE
Output Device 132
Audio Output Device
134
Display Device
136
142
140
Control Device
138

FIGURE 2

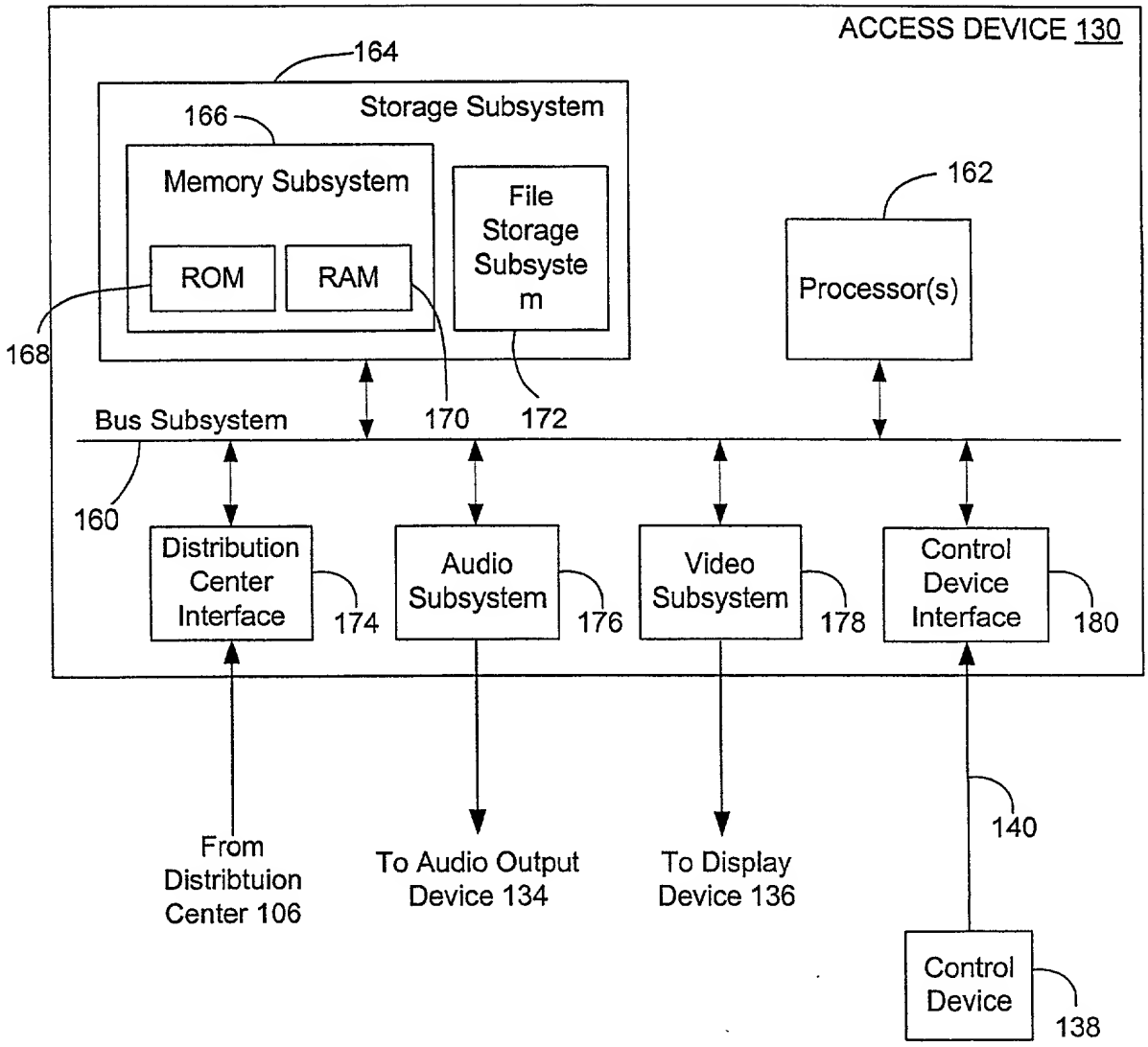
ACCESS DEVICE 130
164
Storage Subsystem
166
Memory Subsystem
ROM
RAM
File Storage Subsyste m
162
Processor(s)
168
170
172
Bus Subsystem
160
Distribution Center Interface
174
Audio Subsystem
176
Video Subsystem
178
Control Device Interface
180
140
From Distribtuion Center 106
To Audio Output Device 134
To Display Device 136
Control Device
138

FIGURE 3

09606836 - 090999

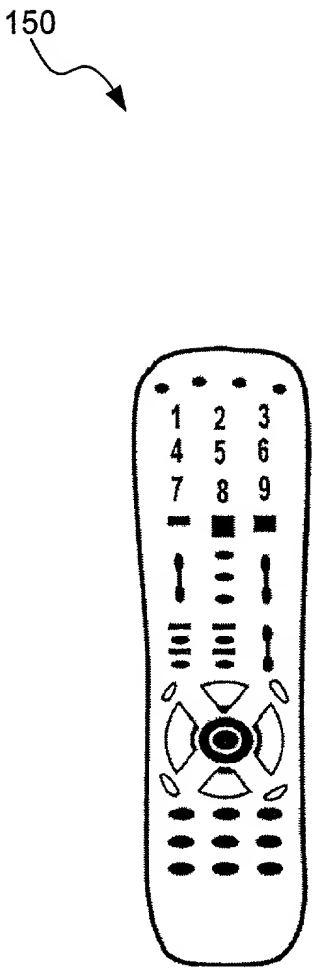

FIGURE 4

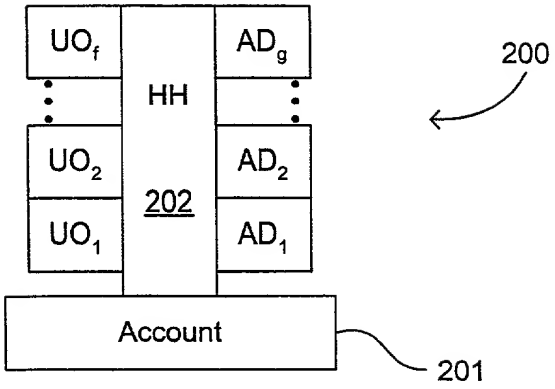

FIGURE 5

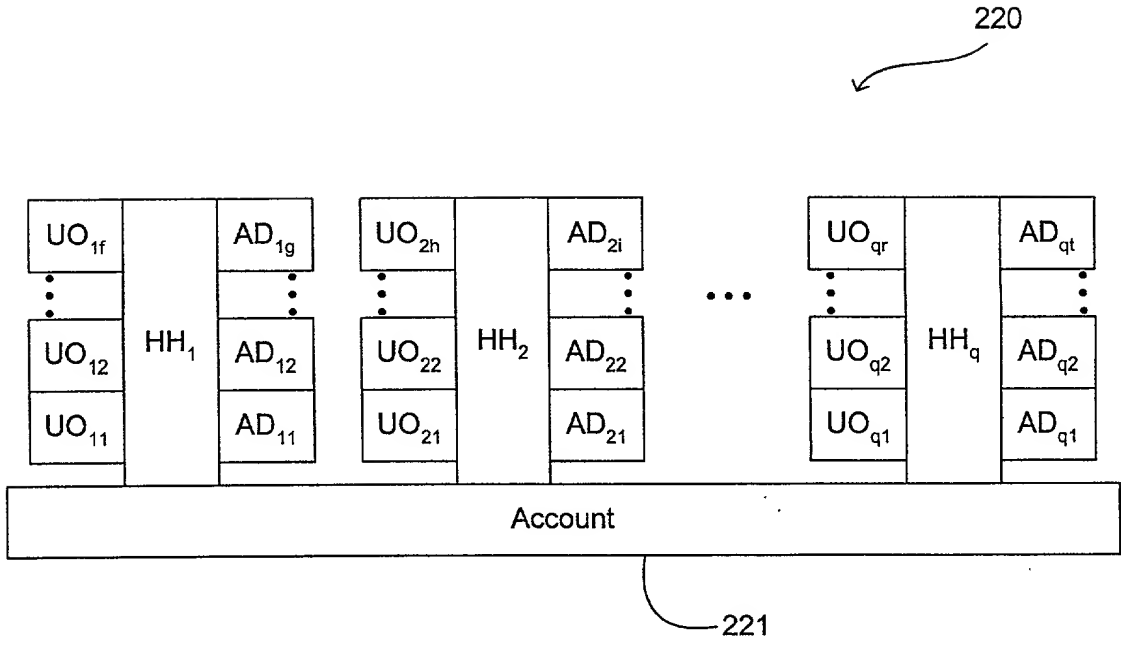

FIGURE 6

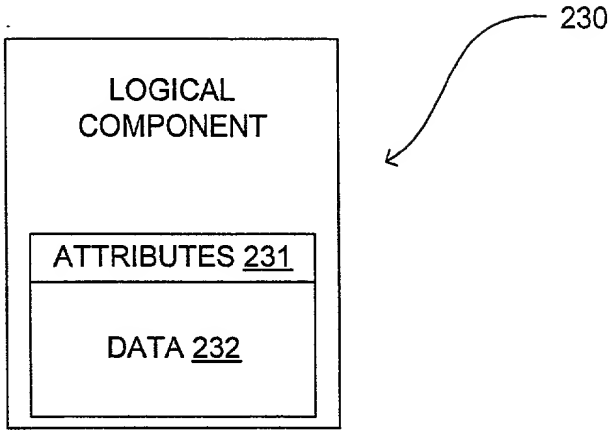

FIGURE 7

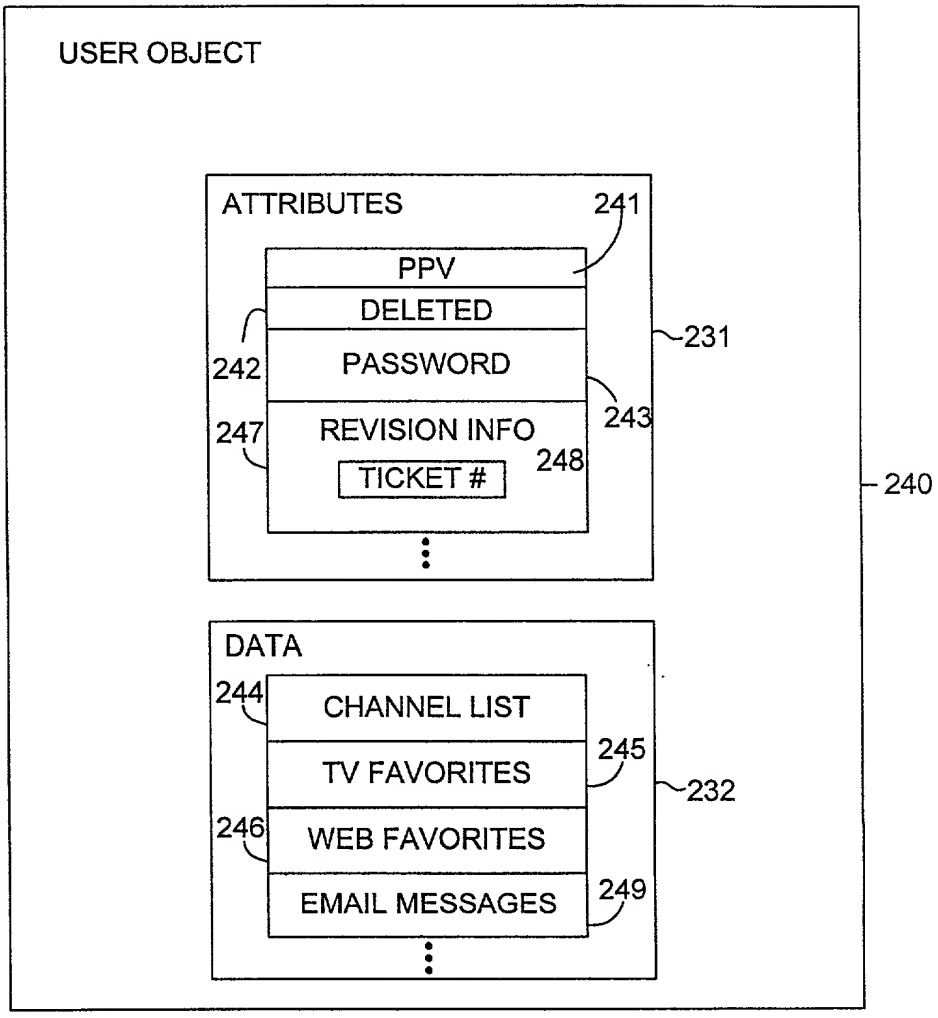

FIGURE 8

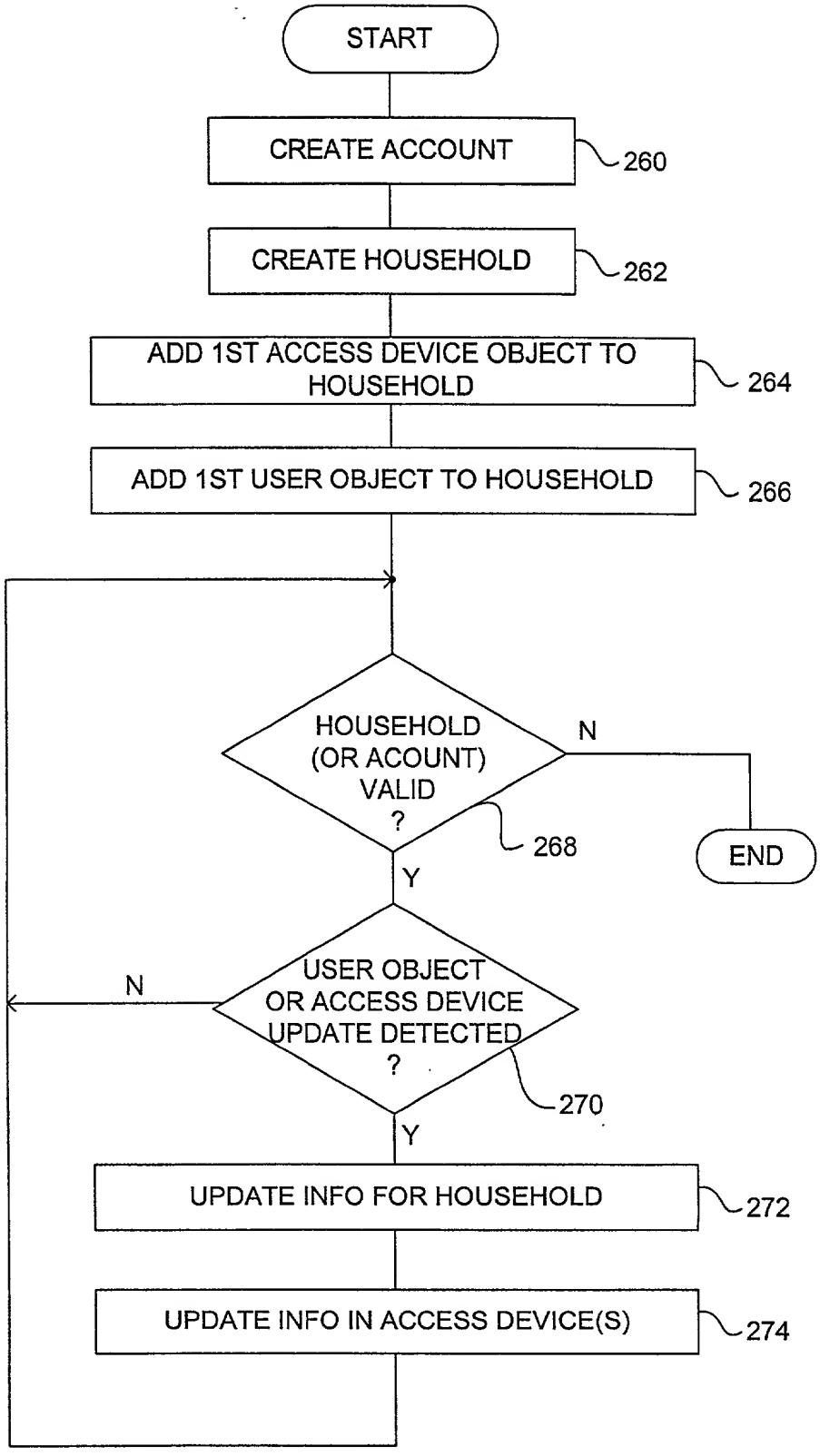
START
CREATE ACCOUNT
260
CREATE HOUSEHOLD
262
ADD 1ST ACCESS DEVICE OBJECT TO HOUSEHOLD
264
ADD 1ST USER OBJECT TO HOUSEHOLD
266
HOUSEHOLD (OR ACOUNT) VALID ?
268
N
END
Y
USER OBJECT OR ACCESS DEVICE UPDATE DETECTED ?
270
N
Y
UPDATE INFO FOR HOUSEHOLD
272
UPDATE INFO IN ACCESS DEVICE(S)
274

FIGURE 9

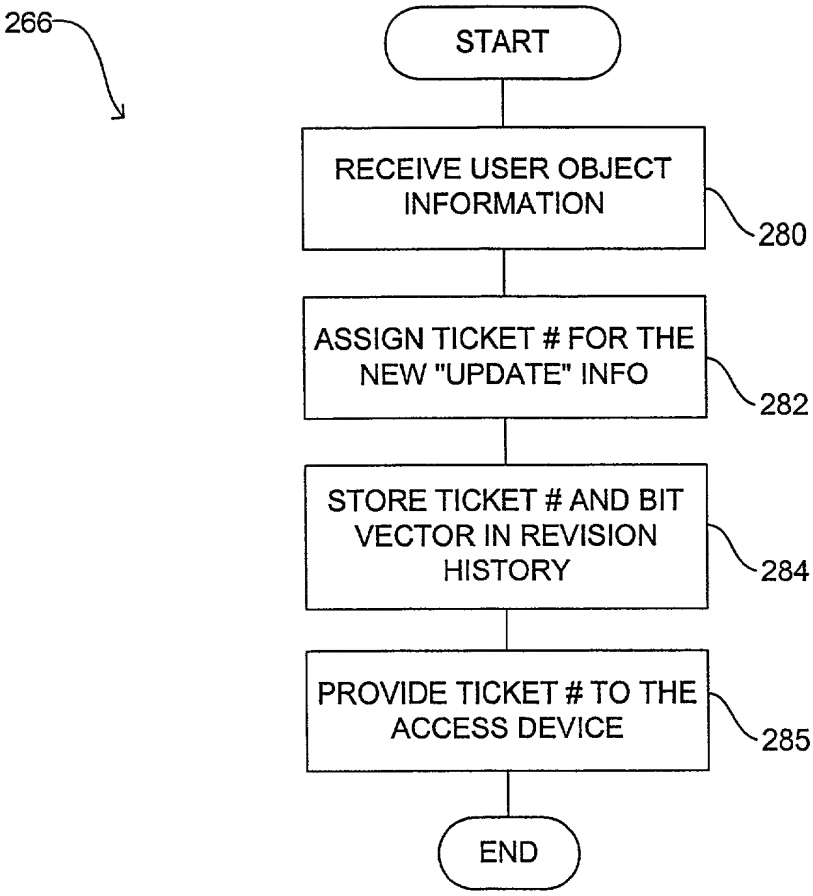
266
START
RECEIVE USER OBJECT INFORMATION
280
ASSIGN TICKET # FOR THE NEW "UPDATE" INFO
282
STORE TICKET # AND BIT VECTOR IN REVISION HISTORY
284
PROVIDE TICKET # TO THE ACCESS DEVICE
285
END

FIGURE 10

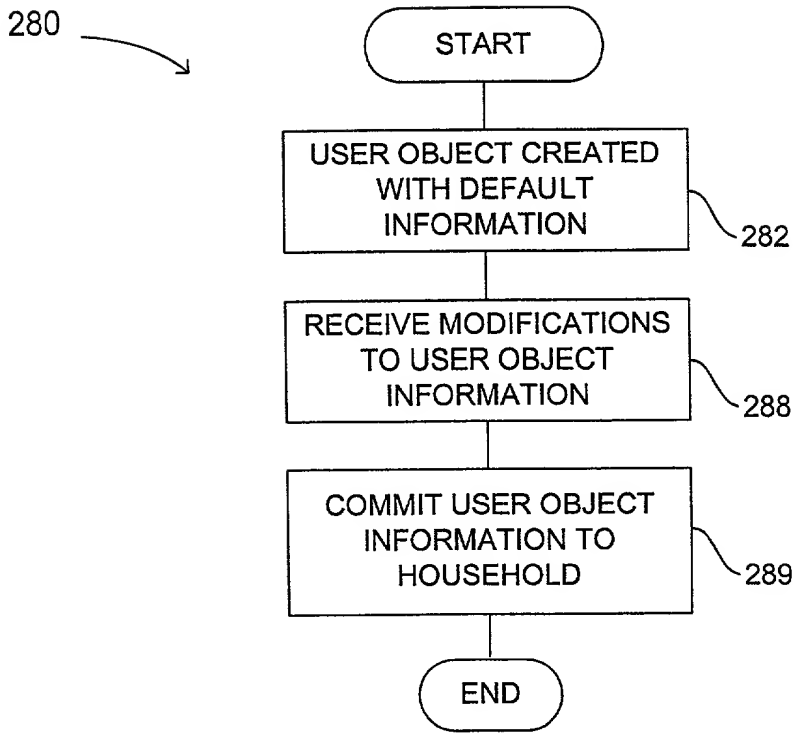

FIGURE 10A

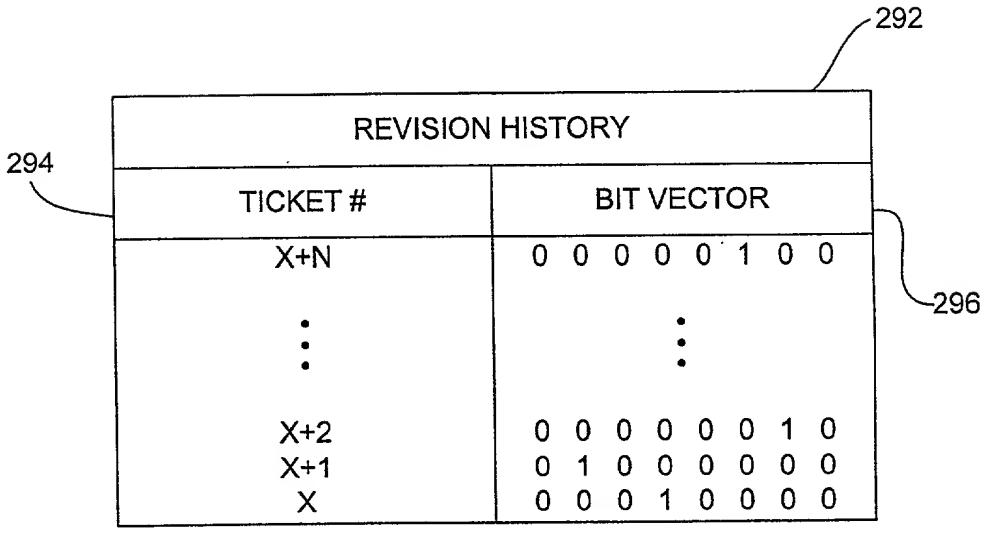

FIGURE 11

SERVER

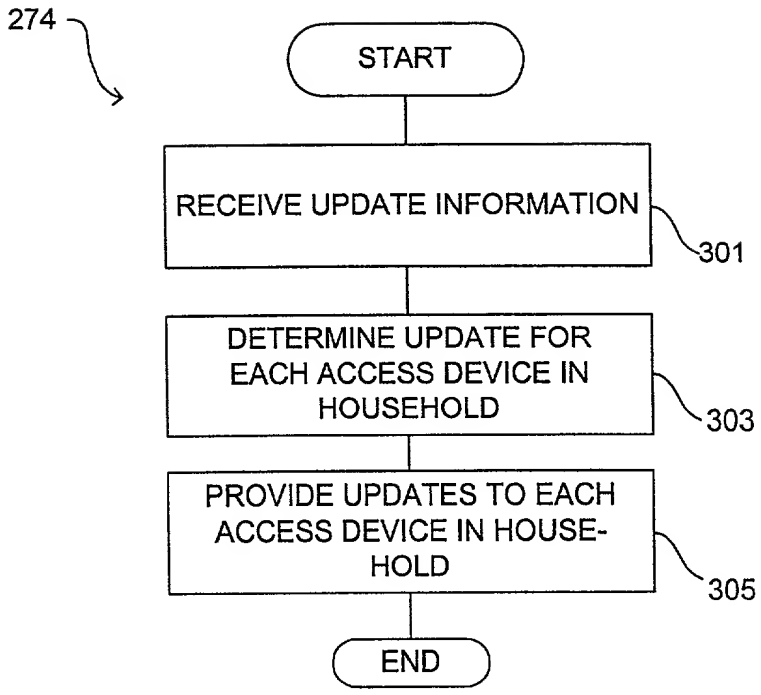

FIGURE 12

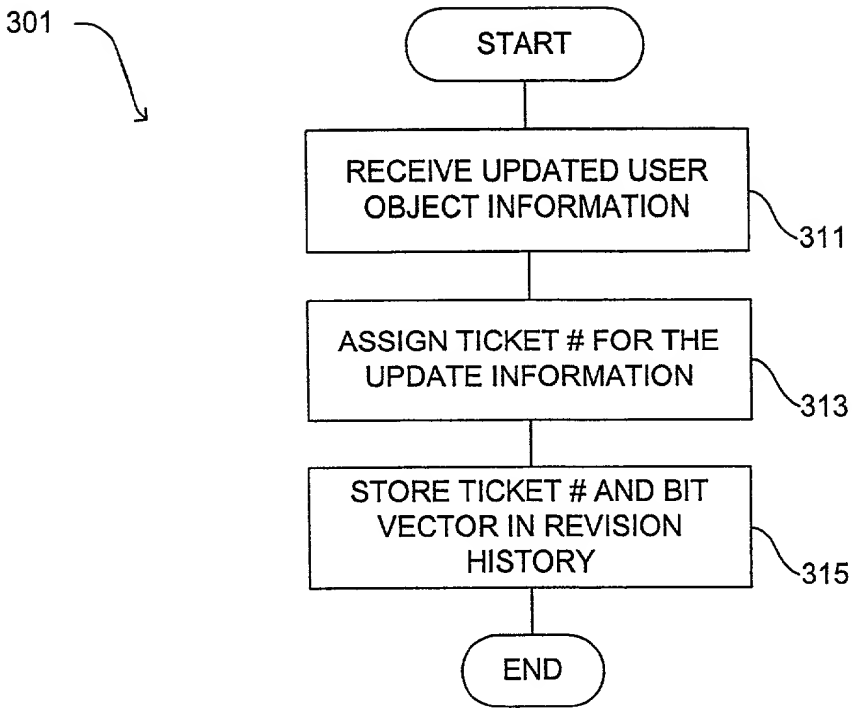
301
START
RECEIVE UPDATED USER OBJECT INFORMATION
311
ASSIGN TICKET # FOR THE UPDATE INFORMATION
313
STORE TICKET # AND BIT VECTOR IN REVISION HISTORY
315
END

FIGURE 13

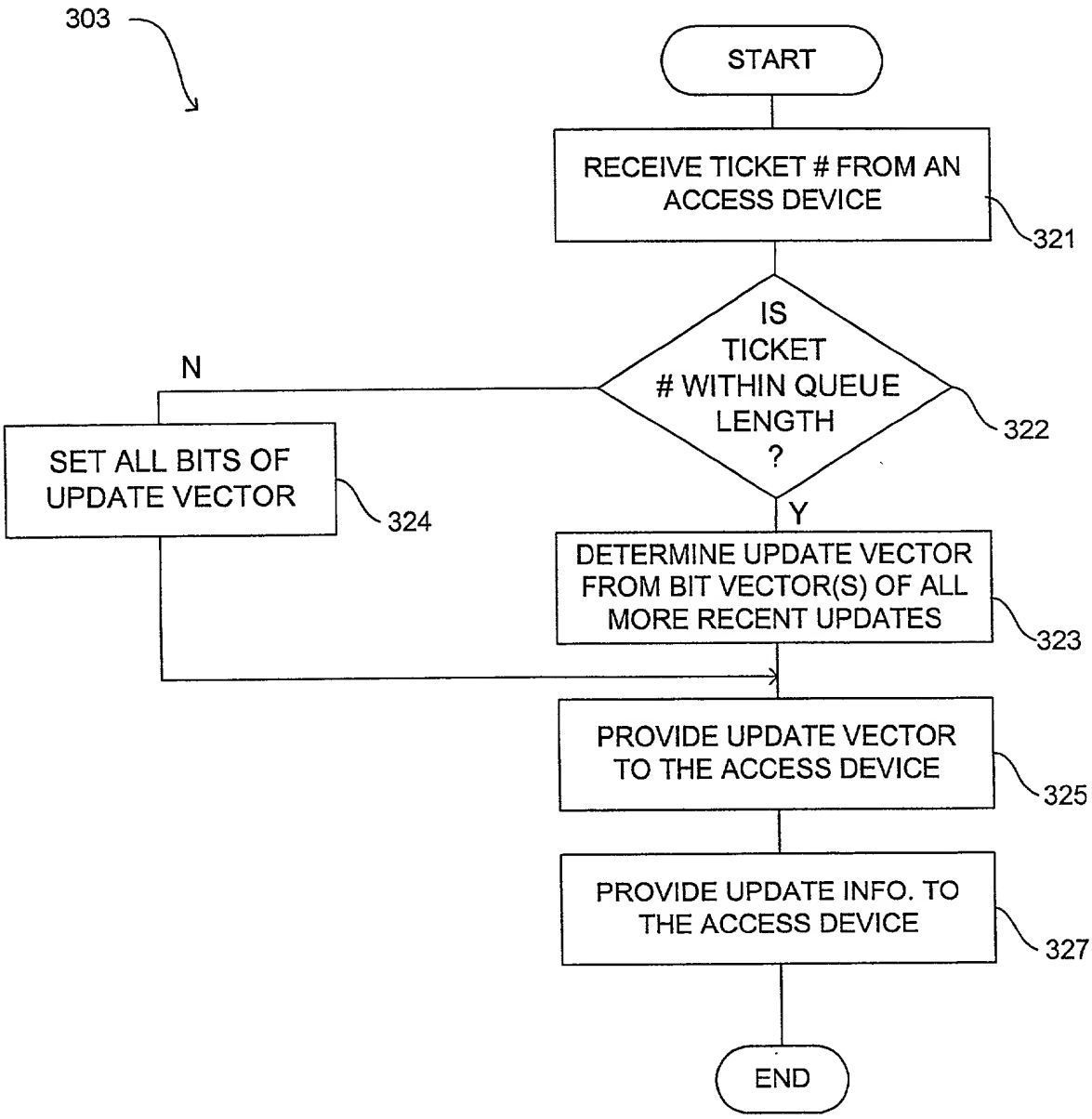
303
START
RECEIVE TICKET # FROM AN ACCESS DEVICE
321
IS TICKET # WITHIN QUEUE LENGTH ?
322
N
Y
SET ALL BITS OF UPDATE VECTOR
324
DETERMINE UPDATE VECTOR FROM BIT VECTOR(S) OF ALL MORE RECENT UPDATES
323
PROVIDE UPDATE VECTOR TO THE ACCESS DEVICE
325
PROVIDE UPDATE INFO. TO THE ACCESS DEVICE
327
END

FIGURE 14

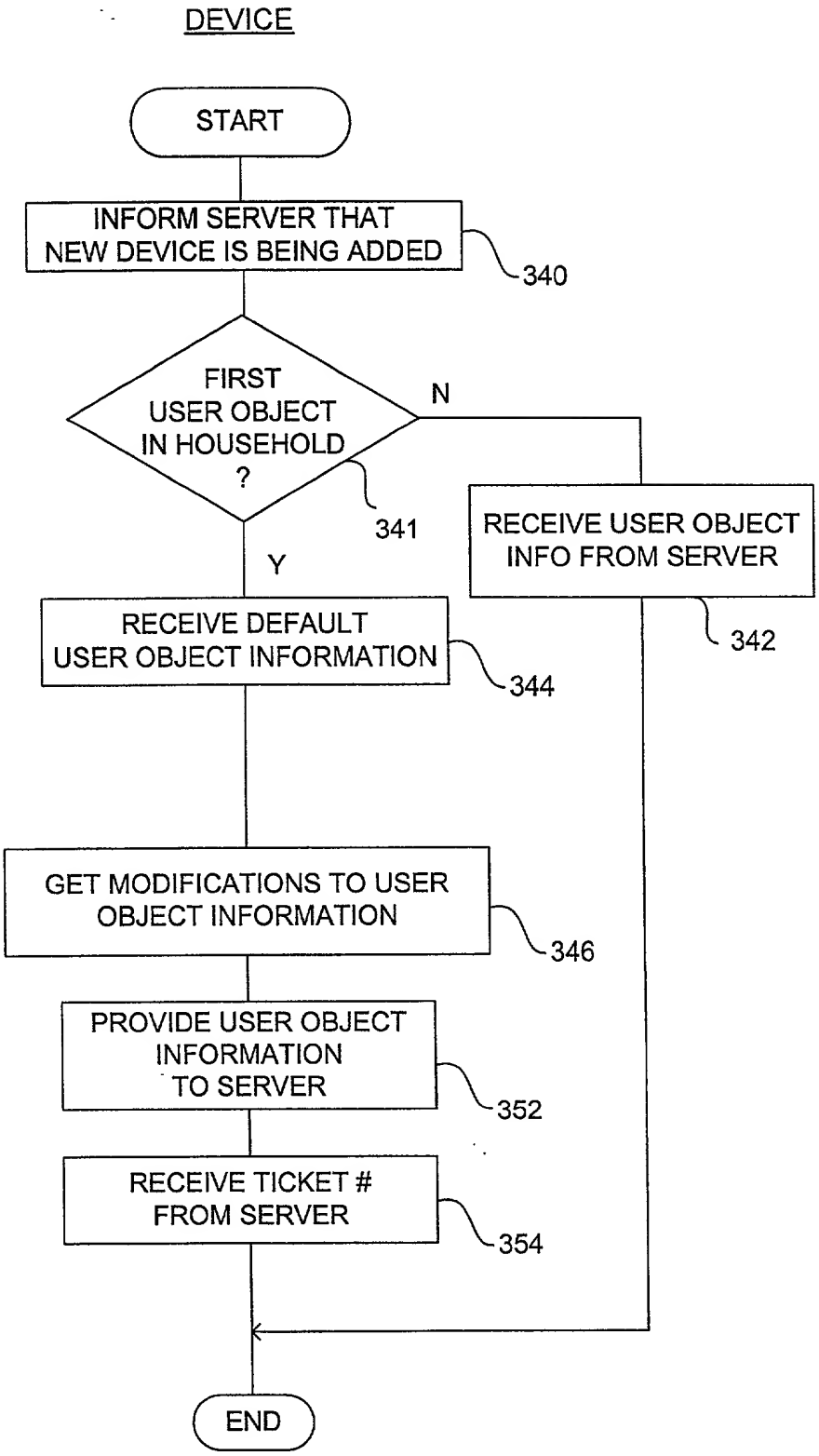
DEVICE
START
INFORM SERVER THAT NEW DEVICE IS BEING ADDED
340
FIRST USER OBJECT IN HOUSEHOLD ?
341
N
Y
RECEIVE USER OBJECT INFO FROM SERVER
342
RECEIVE DEFAULT USER OBJECT INFORMATION
344
GET MODIFICATIONS TO USER OBJECT INFORMATION
346
PROVIDE USER OBJECT INFORMATION TO SERVER
352
RECEIVE TICKET # FROM SERVER
354
END

FIGURE 15

DEVICE

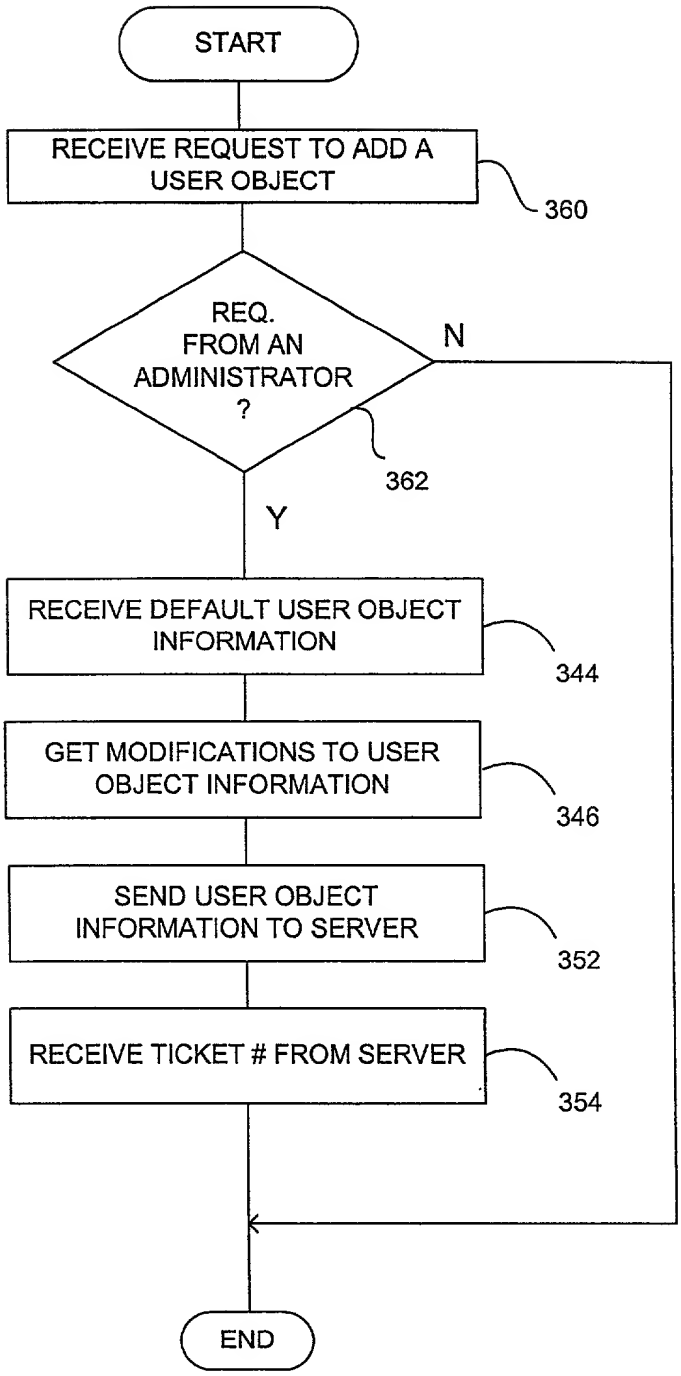

FIGURE 16

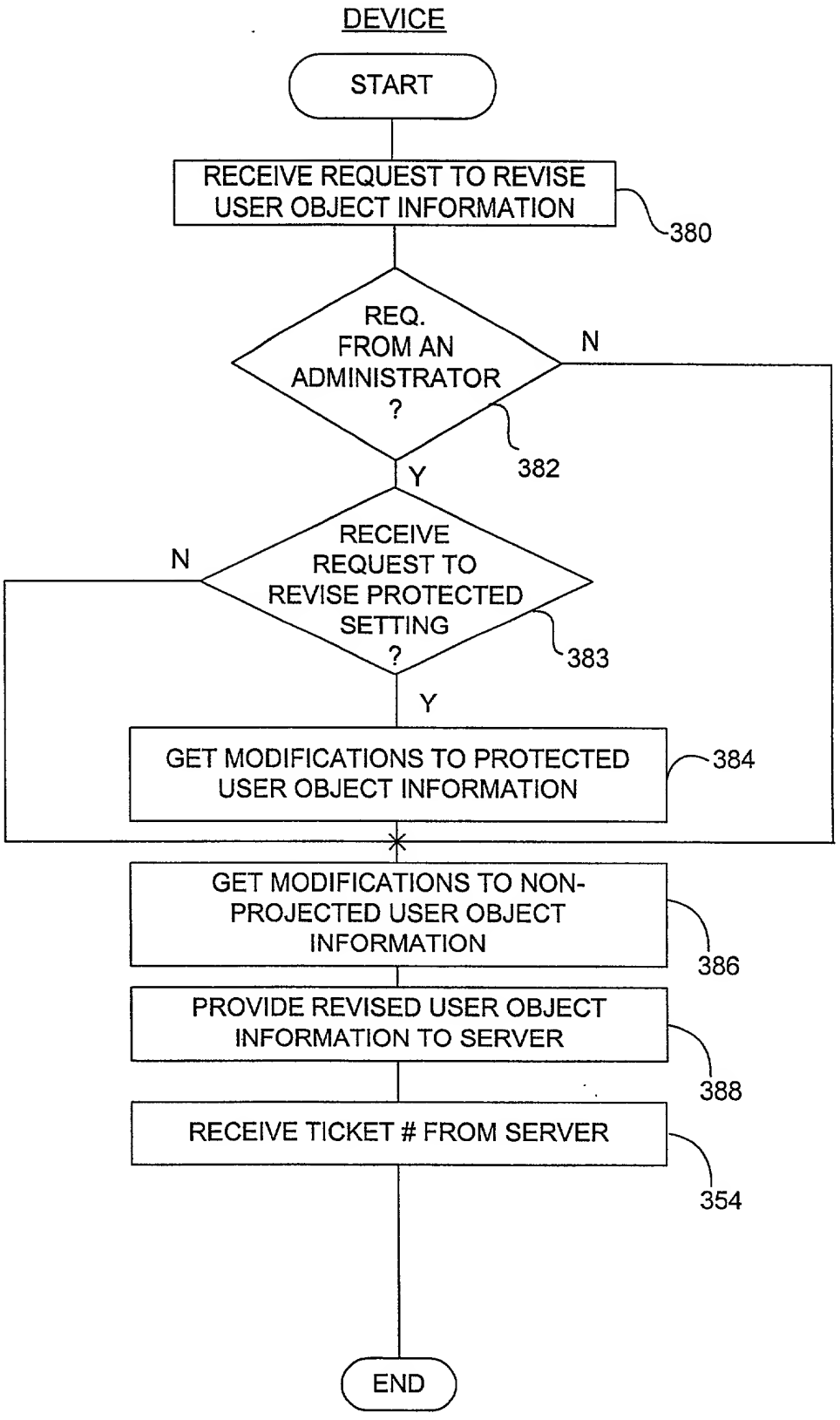
DEVICE
START
RECEIVE REQUEST TO REVISE USER OBJECT INFORMATION
380
REQ. FROM AN ADMINISTRATOR ?
382
N
Y
RECEIVE REQUEST TO REVISE PROTECTED SETTING ?
383
N
Y
GET MODIFICATIONS TO PROTECTED USER OBJECT INFORMATION
384
GET MODIFICATIONS TO NON-PROJECTED USER OBJECT INFORMATION
386
PROVIDE REVISED USER OBJECT INFORMATION TO SERVER
388
RECEIVE TICKET # FROM SERVER
354
END

FIGURE 17

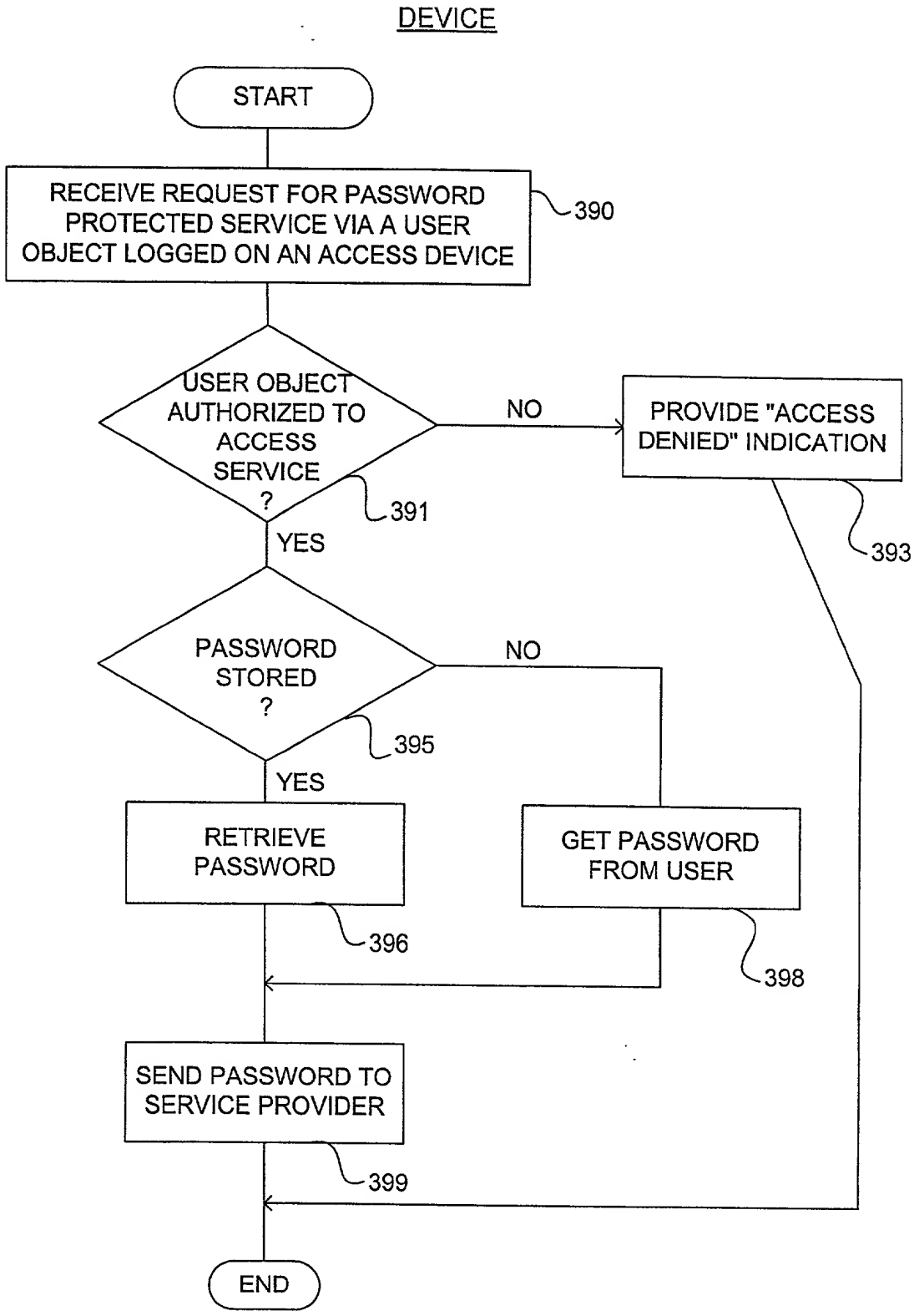
DEVICE
START
RECEIVE REQUEST FOR PASSWORD PROTECTED SERVICE VIA A USER OBJECT LOGGED ON AN ACCESS DEVICE
390
USER OBJECT AUTHORIZED TO ACCESS SERVICE ?
391
NO
PROVIDE "ACCESS DENIED" INDICATION
393
YES
PASSWORD STORED ?
395
NO
YES
RETRIEVE PASSWORD
396
GET PASSWORD FROM USER
398
SEND PASSWORD TO SERVICE PROVIDER
399
END

FIGURE 18